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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/919,586 | 07/30/2001 | Brian J. Elmenhurst | 29094/11:2 | 2587 |
| 3528 | 7590 | 05/24/2005 | EXAMINER | |
| STOEL RIVES LLP - PDX 900 SW FIFTH AVENUE SUITE 2600 PORTLAND, OR 97204 | | | CHANG, JON CARLTON | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2623 | |

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,586

Applicant(s)

ELMENHURST, BRIAN J.

Examiner

Jon Chang

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 and 21-26 is/are allowed.
- 6) ☒ Claim(s) 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Applicant's Drawings, Amendment and Arguments

1. The drawings and amendment filed December 3, 2004, have been entered and made of record. Claim 1 has been amended. Claims 21-26 have been added. Claims 1-26 are pending.

In view of the new drawings, the objection to the drawings is withdrawn.

Applicant's arguments (see pages 9-11) with regard to Higgins have been fully considered and are persuasive. The rejections relying on Higgins are therefore withdrawn.

Applicant's arguments on page 12 have been fully considered, but are not persuasive. Applicant argues that Katsuyama is "inapposite, as it is actually directed to the initial setup or calibration of a scanning apparatus," since Katsuyama states, "it is usually unnecessary to carry out the above operation for setting an optimum parameter every time a new character image is input, when the same kind of characters are successively input" in the paragraph bridging columns 10 and 11. The Examiner responds by pointing out that the Examiner relied on a different embodiment within the patent, which discloses various features of the current claimed invention. Applicant also argues that Katsuyama is "fundamentally different from the invention of claim 1 as it describes a character recognition engine, while the present invention is directed to character string recognition." The Examiner disagrees, as Katsuyama does relate to character string recognition, e.g., see column 6, lines 26-29. However, Applicant's argument (page 11) that Katsuyama does not change recognition subroutine parameters is persuasive. Also, Applicant's argument (page 14) that in Katsuyama there

is no suggestion to test a proposed string against a database of predefined strings as recited in the claims, is persuasive (although Katsuyma does, in fact, recognize strings). Therefore the rejections relying on Katsuyama are withdrawn.

Applicant's arguments on pages 14-15 with regard to Yamamoto have been fully considered. Applicant provides a persuasive argument on page 15, last paragraph, stating that Yamamoto's "proposed result string" is not a phrase that exists in the "word dictionary" of predetermined character strings. Applicant correctly concludes that Yamamoto does not teach or suggest that all valid phrases are predetermined and stored in the database, and that there is no database of correct phrases against which candidate phrases could be tested, which could be applied against the currently claimed invention. Therefore, the rejections relying on Yamamoto are withdrawn.

This office action contains new grounds of rejection, and is therefore nonfinal.

Claim Rejections - 35 USC § 112

2. Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to what statutory class of invention claims 18-20 are directed. Claim 18 is drawn to an "engine." This is not an apparatus, as are engines in the traditional sense. It appears to be relate to a software application or program, comprising such software components as a "recognition subroutine," an "interface," and a "character recognition routine." However, the claim further recites that the engine

comprises two process steps: an "implementing step" and a "selecting" step. Therefore, it appears that the claim is some sort of hybrid of a software program and a process.

Claims 19-20 depend from claim 20, and are therefore indefinite.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 18-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As best understood, claim 18 is directed to an "engine" which appears to be a software or computer program. Software, or a computer program *per se*, are considered functional descriptive material, and are nonstatutory. When such subject matter is claimed, and which does not reside on a computer readable medium to realize the computer program's functionality, or does not perform independent physical acts (i.e., manipulation of data representative of physical objects or activities to achieve a practical application), the claim is not considered statutory.

Allowable Subject Matter

5. Claims 1-17 and 21-26 are allowed.

Claim 1 requires generating a proposed result string by applying a predetermined recognition routine which includes a recognition subroutine employing an initial

parameter setting, determining whether the proposed result string matches any of the predetermined character strings, and if the proposed result string does not match any of the strings, adjusting the initial parameter setting and repeating the generating and determining steps. These features, as claimed, are neither disclosed nor suggested by the prior art of record. Claims 2-16 depend from claim 1.

Claim 17 requires selecting first and second parameter settings for the recognition subroutine, using the first parameter setting to generate a first proposed result string which is matched against the acceptable result strings in the database, and if the first proposed result string does not match any of the acceptable result strings in the database, the second parameter setting is used to generate a second proposed result string. These features, as claimed, are neither disclosed nor suggested by the prior art of record. Claims 21-25 depend from claim 17.

Claim 26 is similar to claim 1, but being somewhat more detailed as it is limited to mail piece address string recognition, with corresponding details recited.

References Cited

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Japanese Patent Publication 3-229386 to Sano discloses tracing the contours of extracted characters, approximates the contours, extracts geometric features of strokes, and compares the features to those in a dictionary for standard patterns, and changes parameters used to approximate the contours.

U.S. Patent 5,020,117 to Ooi et al. discloses a handwritten character string recognition system which first and second character recognition results are stored, the second character recognition results being from characters of the string rotated 180 degrees, coincidences between the two recognition candidates are computed, and a recognition result of the input character string is obtained based on the coincidences.

U.S. Patent 6,115,707 to Shimomura discloses an address reading apparatus which utilizes word recognition.


U.S. Patent 6,859,556 to Takebe et al. discloses a word recognizing system which composes the feature amount of a candidate word to be recognized which is registered in a word list. The system compares the composed feature amount with the feature amount from an image, calculating a degree of similarity, and then outputs a recognition result.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon Chang whose telephone number is (571) 272-7417. The examiner can normally be reached on M-F 8:00 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (571)272-7414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jon Chang
Primary Examiner
Art Unit 2623

Jon Chang
May 19, 2005